

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-24 (canceled)

Claim 25 (new): An isolated polynucleotide comprising:

- (a) a nucleotide sequence encoding a polypeptide having isoflavone 2-hydroxylase activity, wherein the polypeptide has an amino acid sequence of at least 80% sequence identity, based on the Clustal V method of alignment, when compared to SEQ ID NO:2, or
- (b) a full-length complement of the nucleotide sequence of (a).

Claim 26 (new): The polynucleotide of Claim 25, wherein the amino acid sequence of the polypeptide has at least 85% sequence identity, based on the Clustal V method of alignment, when compared to SEQ ID NO:2.

Claim 27 (new): The polynucleotide of Claim 25, wherein the amino acid sequence of the polypeptide has at least 90% sequence identity, based on the Clustal V method of alignment, when compared to SEQ ID NO:2.

Claim 28 (new): The polynucleotide of Claim 25, wherein the amino acid sequence of the polypeptide has at least 95% sequence identity, based on the Clustal V method of alignment, when compared to SEQ ID NO:2.

Claim 29 (new): The polynucleotide of Claim 25, wherein the amino acid sequence of the polypeptide comprises SEQ ID NO:2.

Claim 30 (new): The polynucleotide of Claim 25 wherein the nucleotide sequence comprises SEQ ID NO:1.

Claim 31 (new): A vector comprising the polynucleotide of Claim 25.

Claim 32 (new): A recombinant DNA construct comprising the polynucleotide of Claim 25 operably linked to at least one regulatory sequence.

Claim 33 (new): A method for transforming a cell, comprising transforming a cell with the polynucleotide of Claim 25.

Claim 34 (new): A cell comprising the recombinant DNA construct of Claim 32.

Claim 35 (new): A method for producing a plant comprising transforming a plant cell with the polynucleotide of Claim 25 and regenerating a plant from the transformed plant cell.

Claim 36 (new): A plant comprising the recombinant DNA construct of Claim 32.

Claim 37 (new): A seed comprising the recombinant DNA construct of Claim 32.